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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,075	01/18/2006	Takeshi Koda	8048-1139	3697

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EXAMINER	
PENDLETON, DIONNE	
ART UNIT	**PAPER NUMBER**
2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,075	KODA ET AL.	
	Examiner	Art Unit	
	DIONNE H. PENDLETON	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2008*.

2a)☐ This action is FINAL. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *1/18/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 17-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (US 5,914,928).

Regarding claim 17,

Takahashi teaches a write-once-type recording medium comprising:

a data area ("400" in figure 12) to record therein record data;

a control information recording area (see "501" and "502" in figure 12), which includes a definite defect management area (502) to record therein defect management information of said data area, to record therein information for controlling at least one of operations of recording and reading in said data area (see column 13:17-20, and column 23:20-37);

and a shared area ("503" in figure 12), which is disposed between said control information recording area (501,502) and said data area (see "ECC" or "400"), to record therein evacuation data which is record data to be recorded at a position of a defect in

said data area and to temporarily record therein the defect management information of said data area ("evacuation data" is interpreted as corresponding at least in part to that area of the ECC block which is found to have a secondary defect, as discussed in column 23, lines 4-7, and which as a result is moved to an allocated replacement block; while the "defect management area" is interpreted as corresponding at least in part to the "header number" and "sector ID number" which is added to the allocated replacement block, as discussed in column 23, lines 20-37).

Regarding claim 18,

Takahashi teaches that the evacuation data and the defect management information is continuously recorded in the shared area (figure 23 illustrates that defect management information, i.e., header #, sector #, are directly adjacent to the data section used for evacuation data. Their directly adjacent position is interpreted by the Examiner as corresponding at least in part to "continuously recorded"; also see column 15:20-21).

Regarding claim 19,

Takahashi teaches that the evacuation data and defect management information are recorded, repeatedly, a plurality of times, in said shared area (see numerous replacement blocks "503" in figure 12, also see repeated and continuous replacement blocks in figure 23, for allowing repeated recording of evacuation data therein).

Regarding claims 20 and 23,

Takahashi teaches a recording method and apparatus for recording onto a write-once-type recording medium comprising:

(i) a data area ("400" in figure 12) to record therein record data;

(ii) a control information recording area (see "501" and "502" in figure 12), which includes a definite defect management area (502) to record therein defect management information of said data area, to record therein information for controlling at least one of operations of recording and reading in said data area (see column 13:17-20, and column 23:20-37); and

(iii) a shared area (see numerous "503" areas in figure 12) disposed between said control information recording area (501,502) and said data area (see "ECC" or "400"), to record therein evacuation data which is record data to be recorded at a position of a defect in said data area and to temporarily record therein the defect management information of said data area ("evacuation data" is interpreted as corresponding at least in part to that area of the ECC block which is found to have a secondary defect, as discussed in column 23, lines 4-7, and which as a result is moved to an allocated replacement block; while the "defect management area" is interpreted as corresponding at least in part to the "header number" and "sector ID number" which is added to the allocated replacement block, as discussed in column 23, lines 20-37),

said recording apparatus comprising:

a first recording process/device ("13" in figure 2) for recording the record data into said data area; and

a second recording process/device (using "32" in figure 10, as discussed in column 12:15-23) for recording the evacuation data and the defect management information into said shared area.

Regarding claim 21,

Takahashi teaches that the evacuation data and the defect management information is continuously recorded in the shared area (figure 23 illustrates that defect management information, i.e., header #, sector #, are directly adjacent to the data section used for evacuation data. Their directly adjacent position is interpreted by the Examiner as corresponding at least in part to "continuously recorded"; also see column 15:20-21).

Regarding claim 22,

Takahashi teaches that the second recording device uses a border point as a start point, to record the evacuation data and the defect management information into the data-unrecorded area (figure 23 illustrates a plurality of replacement areas existing within the shared area. The starting point of a subsequent replacement recording is interpreted as corresponding at least in part to the "border point" between a data-recorded-area and a data-unrecorded-area).

Regarding claims 24 and 26,

Takahashi teaches a reproducing method and apparatus for reproducing the record data recorded on a write-once-type recording medium comprising:

(i) a data area ("400" in figure 12) to record therein record data;

(ii) a control information recording area (see "501" and "502" in figure 12), which includes a definite defect management area (502) to record therein defect management information of said data area, to record therein information for controlling at least one of operations of recording and reading in said data area (see column 13:17-20, and column 23:20-37); and

(iii) a shared area (see numerous "503" areas in figure 12), is disposed between said control information recording area (501,502) and said data area (see "ECC" or "400"), to record therein evacuation data which is record data to be recorded at a position of a defect in said data area and to temporarily record therein the defect management information of said data area ("evacuation data" is interpreted as corresponding at least in part to that area of the ECC block which is found to have a secondary defect, as discussed in column 23, lines 4-7, and which as a result is moved to an allocated replacement block; while the "defect management area" is interpreted as corresponding at least in part to the "header number" and "sector ID number" which is added to the allocated replacement block, as discussed in column 23, lines 20-37),

said reproducing method/apparatus comprising:

a reading process/device (“13” in figure 2) for reading the defect management information recorded in said shared area; and

a reproducing process/device (using “32” in figure 10, as discussed in column 12:15-23) for reproducing the record data recorded in said data area or the evacuation data recorded in said spare area, on the basis of the read defect management information.

Regarding claim 25,

Takahashi teaches that the reading device searches for a border point as a start point, to read the defect management information (column 15:20-21 discloses that the defective area is exchanged by the first available good spare block; column 23:5-40 disclose that defect management information includes the related physical address and corresponding logical address.)

Regarding claim 27,

Takahashi teaches a computer program product for recording control in a computer-readable medium for tangibly embodying a program of instructions executable by a computer provided for a recording apparatus, said program making the computer function as at least one portion of a first recording device and a second recording device, said recording apparatus for recording record data onto a write-once-type recording medium comprising:

(i) a data area (“400” in figure 12) to record therein record data;

(ii) a control information recording area (see “501” and “502” in figure 12), which includes a definite defect management area (502) to record therein defect management information of said data area, to record therein information for controlling at least one of operations of recording and reading in said data area (see column 13:17-20, and column 23:20-37); and

(iii) a shared area (see numerous “503” areas in figure 12), disposed between said control information recording area (501,502) and said data area (see “ECC” or “400”), to record therein evacuation data which is record data to be recorded at a position of a defect in said data area and to temporarily record therein the defect management information of said data area (“evacuation data” is interpreted as corresponding at least in part to that area of the ECC block which is found to have a secondary defect, as discussed in column 23, lines 4-7, and which as a result is moved to an allocated replacement block; while the “defect management area” is interpreted as corresponding at least in part to the “header number” and “sector ID number” which is added to the allocated replacement block, as discussed in column 23, lines 20-37),

said recording apparatus comprising:

said first recording device (“13” in figure 2) for recording the record data into said data area; and said second recording device (using “32” in figure 10, as discussed in column 12:15-23) for recording the evacuation data and the defect management information into said shared area.

Regarding claim 28,

Takahashi teaches a computer program product for reproduction control in a computer-readable medium for tangibly embodying a program of instructions executable by a computer provided for a reproducing apparatus, said program making the computer function as at least one portion of a reading device and a reproducing device, said reproducing apparatus for reproducing the record data recorded on a write-once-type recording medium comprising:

(i) a data area ("400" in figure 12) to record therein record data;

(ii) a control information recording area (see "501" and "502" in figure 12), which includes a definite defect management area (502) to record therein defect management information of said data area, to record therein information for controlling at least one of operations of recording and reading in said data area (see column 13:17-20, and column 23:20-37); and

(iii) a shared area (see numerous "503" areas in figure 12), disposed between said control information recording area (501,502) and said data area (see "ECC" or "400"), to record therein evacuation data which is record data to be recorded at a position of a defect in said data area and to temporarily record therein the defect management information of said data area ("evacuation data" is interpreted as corresponding at least in part to that area of the ECC block which is found to have a secondary defect, as discussed in column 23, lines 4-7, and which as a result is moved to an allocated replacement block; while the "defect management area" is interpreted as

corresponding at least in part to the “header number” and “sector ID number” which is added to the allocated replacement block, as discussed in column 23, lines 20-37),

said reproducing apparatus comprising:

said reading device (“13” in figure 2) for reading the defect management information recorded in said shared area; and

said reproducing device (using “32” in figure 10, as discussed in column 12:15-23) for reproducing the record data recorded in said data area or the evacuation data recorded in said spare area, on the basis of the read defect management information.

Response to Arguments

2. Applicant's arguments with respect to the rejection of claims 17-28 in the Official Action mailed 10/02/2008 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627